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November 16, 2017

Dudee Chiang, Jet Propulsion Laboratory Library
California Institute Of Technology

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A 1960 orrery, or model of the solar system

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Google Scholar

volcanology chemistry and physics

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The supercooling of water

EK Bigg - Proceedings of the Physical Society. Section B, 1953 - iopscience.iop.org

... behavior in aqueous polyvinyl alcohol solutions S. Ogawa et al 2009 **Chemical Physics Letters** 480 ... Crystal nucleation from aqueous solution TP Melia 2007 Journal of Applied **Chemistry** 15 345 ... hydrometeors and ash C. Textor et al 2006 Journal of **Volcanology** and Geothermal ...

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A new mechanism for regional atmospheric chemistry modeling

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... Papers on Climate and Atmospheric **Physics** ... Check for new citations; Citing literature. Abstract.

A new gas-phase **chemical** mechanism for the modeling of regional atmospheric **chemistry**, the "Regional Atmospheric **Chemistry** Mechanism" (RACM) is presented. ...

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A New Model-Based Control Structure for Position Tracking in an Acceleration Constraint

By: Rezayi, Soheil; Arbabtafti, Mohammadreza

JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Volume: 139 Issue: 12 Article Number: 121006 Published: DEC 2017

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Robust adaptive critic control design with network-based event-triggered communication

By: Mu, Chaoxu; Wang, Ding; Sun, Changyin; et al.

NONLINEAR DYNAMICS Volume: 90 Issue: 3 Pages: 2023-2035 Published: OCT 2017

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Implementing pseudo haptic feedback in a semi-isometric master-slave teleoperation system

By: Kim, In; Tadano, Kotaro; Kanno, Takahiro; et al.

INTERNATIONAL JOURNAL OF ADVANCED ROBOTIC SYSTEMS Volume: 17 Issue: 12 Article Number: 1729881417733885 Published: OCT 12 2017

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Millimeter-Scale Fabrication Method for Soft Biocompatible Microfluidic Devices

By: Raza, Raza; Ranzani, Tommaso; Walsh, Conor J.; et al.

MATERIALS TECHNOLOGIES Volume: 2 Issue: 10 Article Number: 1729881417733885 Published: OCT 12 2017

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Control systems and the internet of things — Shrinking the gap between the two

By: Edward Smith; Luke Fuller

2017 56th FITCE Congress

Year: 2017

Pages: 68 - 73

IEEE Conference Publications

[Abstract](#)

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Enhanced secure time synchronisation protocol for IEEE802.15.4e-based industrial Internet of Things

By: Wei Yang; Yadong Wan; Qin Wang

IET Information Security

Year: 2017, Volume: 11, Issue: 6

Pages: 369 - 376

IET Journals & Magazines

[Abstract](#)

(2682 Kb)

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Handbook of induction heating

By: Valery Rudnev, Don Loveless (Consultant), eBook 2017

"The second edition of the Handbook of Induction Heating addresses the development of semi-conducting power electronics. Held by: [Jet Propulsion Laboratory Library](#)

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Handbook of solid-state lighting and LEDs

By: Zhe Chuan Feng, eBook 2017

"This handbook addresses the development of solid-state lighting. Held by: [Jet Propulsion Laboratory Library](#)

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Handbook of material flow analysis : for environmental impact assessment

By: Paul H. Brunner, Helmut Rechberger, eBook 2017

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Any insights from the patterns?



Are there patterns?



What are the publication years of the downloaded articles?

Journal Report 5 (R4)	Number of Successful Full-Text Article Requests by Year-of-Publication (YOP) and Journal									
2016-01-01 to 2016-12-31										
Journal	Publisher	Platform	Article in P	YOP 2017	YOP 2016	YOP 2015	YOP 2014	YOP 2013	YOP 2012	YOP
Total for all journals		ScienceDir	74	1641	13288	6293	4329	3563	3262	
Accident Analysis & Prevention	Elsevier	ScienceDir	0	0	0	0	0	0	0	
Accounting, Organizations and Society	Elsevier	ScienceDir	0	0	0	0	0	0	0	
Acta Astronautica	Elsevier	ScienceDir	1	43	436	137	142	150	64	
Acta Biomaterialia	Elsevier	ScienceDir	0	0	0	0	0	0	1	
Acta Materialia	Elsevier	ScienceDir	0	1	41	11	6	22	5	
Advances in Space Research	Elsevier	ScienceDir	0	39	567	213	135	77	86	
Advances in Surgery	Elsevier	ScienceDir	0	0	0	0	0	0	0	
Advances in Water Resources	Elsevier	ScienceDir	0	0	28	26	3	12	6	
Aeolian Research	Elsevier	ScienceDir	0	0	5	0	0	0	0	
Aerospace Science and Technology	Elsevier	ScienceDir	0	8	106	24	12	12	5	
AEU - International Journal of Electro	Elsevier	ScienceDir	0	0	0	0	0	0	0	

COUNTER JOURNAL REPORT 5 (JR5)

- Number of successful full-text requests by Year of Publication (YOP) and Journal
- Period covered: Jan 1, 2016 – Dec 31, 2016
- Total for all journals from publisher
- Breakdown by individual journals and publication year

Journal	Total	Article in P	YOP 2017	YOP 2016	YOP 2015	YOP 2014	YOP 2013	YOP 2012	YOP 2011	YOP 2010
Total for all journals	60244	74	1641	13288	6293	4329	3563	3262	2407	2201
Icarus	12740	0	792	3749	1272	904	585	614	443	513
Remote Sensing of Environme	4415	0	44	1417	534	375	195	286	207	105
Planetary and Space Science	3389	1	10	724	343	445	171	342	98	100
Acta Astronautica	2035	1	43	436	137	142	150	64	122	58
Advances in Space Research	1927	0	39	567	213	135	77	86	157	72
Earth and Planetary Science L	1615	0	60	528	264	158	53	63	67	82
Journal of Volcanology and G	1398	0	2	280	86	18	33	52	34	12
Journal of Quantitative Spectr	1361	0	152	369	138	68	85	65	78	65
Geochimica et Cosmochimica	1024	0	19	253	101	61	45	22	22	20
Atmospheric Environment	972	0	9	200	183	75	112	41	67	44
Journal of Power Sources	694	0	15	196	70	35	40	44	35	21
Journal of Molecular Spectros	662	0	6	199	56	40	22	21	12	35
Atmospheric Research	561	0	29	180	94	60	55	40	10	7
Nuclear Instruments and Met	536	0	1	75	43	11	21	25	25	32
Journal of Atmospheric and S	443	0	17	118	74	26	21	27	35	15

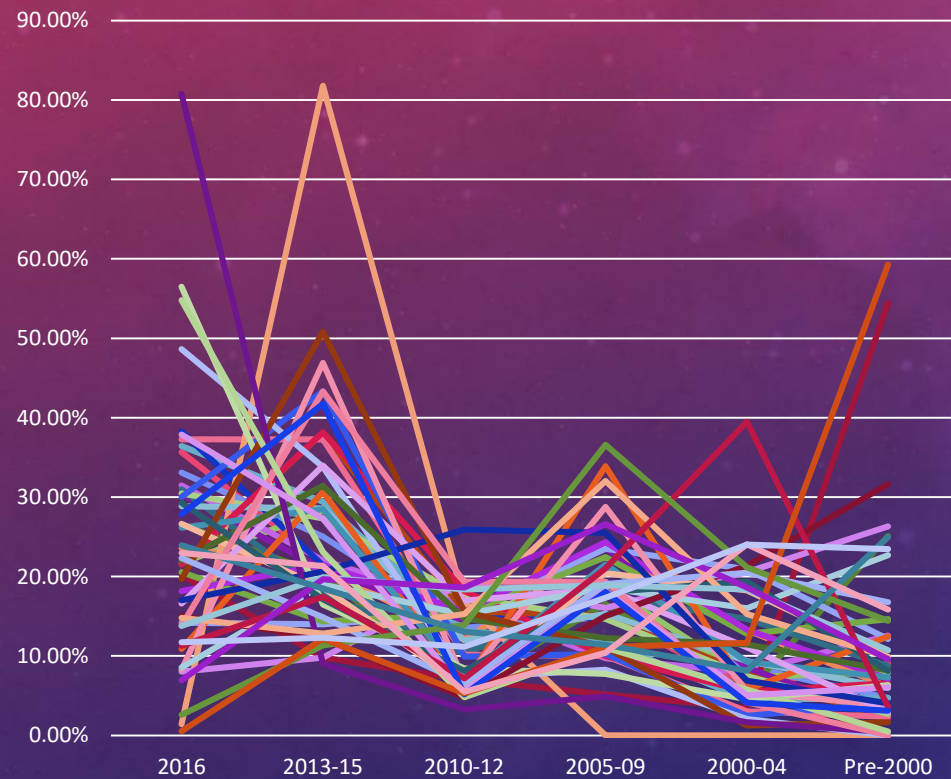
- Calculate total for each journal, then sort by total downloads
- Aggregate by years for fewer data points
- Calculate the aggregated subtotals as percentage

2016 2013-15 2010-12 2005-09 2000-04 Pre-2000

Journal	2016	2013-15	2010-12	2005-09	2000-04	Pre-2000
Total for all journals	24.90%	23.55%	13.06%	16.62%	9.91%	11.96%
Icarus	35.64%	21.67%	12.32%	15.10%	6.24%	9.02%
Remote Sensing of Environmer	33.09%	25.01%	13.54%	14.97%	8.65%	4.73%
Planetary and Space Science	21.69%	28.30%	15.93%	18.80%	7.35%	7.94%
Acta Astronautica	23.59%	21.08%	11.99%	23.93%	13.27%	6.14%
Advances in Space Research	31.45%	22.06%	16.35%	9.70%	7.89%	12.56%
Earth and Planetary Science Le	36.41%	29.41%	13.13%	11.89%	4.46%	4.71%
Journal of Volcanology and Ge	20.17%	9.80%	7.01%	5.15%	3.43%	54.43%
Journal of Quantitative Spectro	38.28%	21.38%	15.28%	14.70%	7.64%	2.72%
Geochimica et Cosmochimica	26.56%	20.21%	6.25%	16.50%	5.37%	25.10%
Atmospheric Environment	21.50%	38.07%	15.64%	15.02%	7.82%	1.95%
Journal of Power Sources	30.40%	20.89%	14.41%	23.63%	8.50%	2.16%
Journal of Molecular Spectrosc	30.97%	17.82%	10.27%	17.52%	14.65%	8.76%
Atmospheric Research	37.25%	37.25%	10.16%	9.98%	3.03%	2.32%
Nuclear Instruments and Meth	14.18%	13.99%	15.30%	23.51%	20.90%	12.13%
Journal of Atmospheric and Sol	30.47%	27.31%	17.38%	14.67%	7.45%	2.71%
Procedia Engineering	1.42%	81.80%	16.78%	0.00%	0.00%	0.00%

Lost in spreadsheets

Graph them

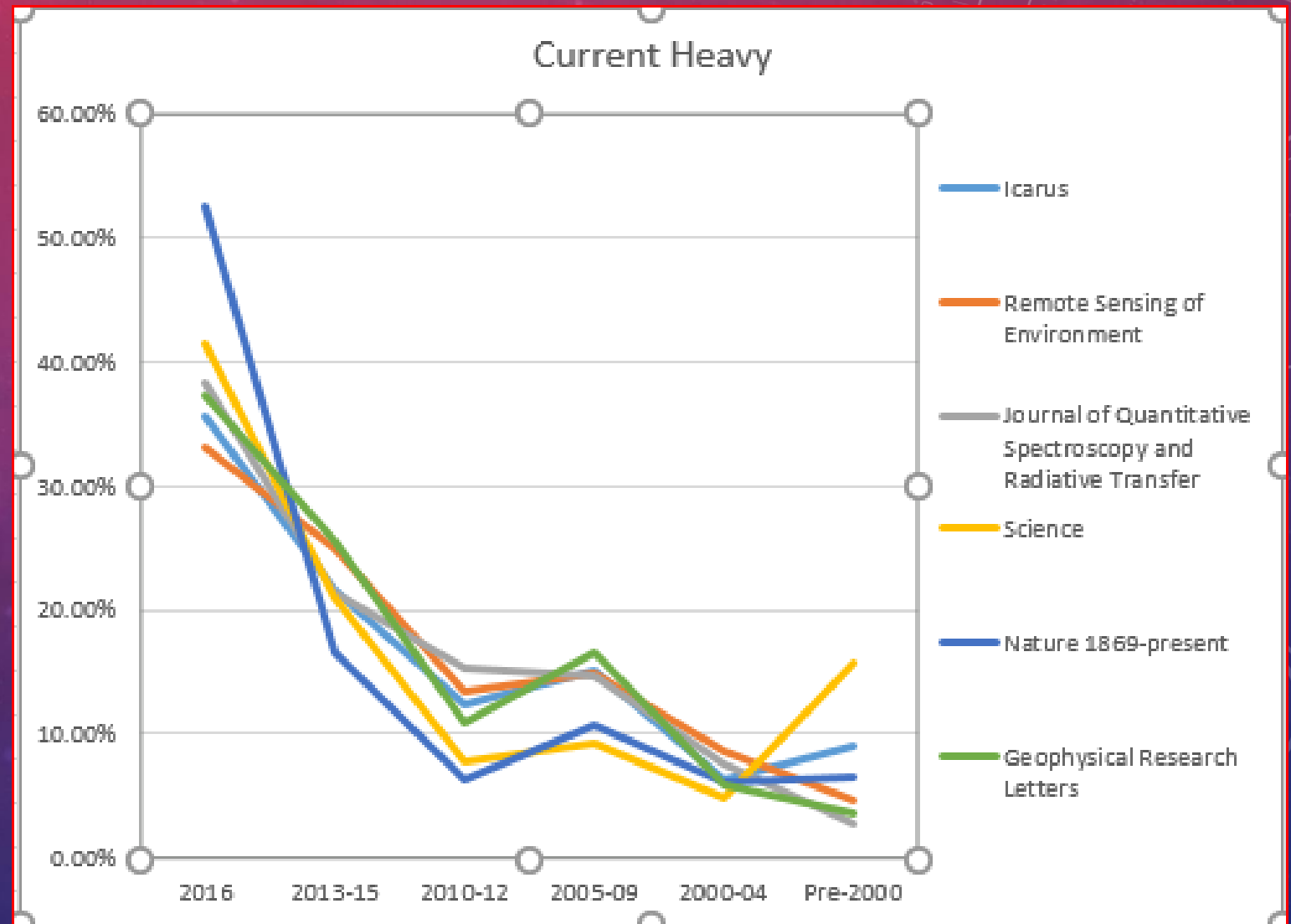


Looking for patterns

Journal	2016	2013-15	2010-12	2005-09	2000-04	Pre-2000
Total for all journals	24.90%	23.55%	13.06%	16.62%	9.91%	11.96%
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Earth and Planetary Science Le	36.41%	29.41%	13.13%	11.89%	4.46%	4.71%
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Journal of Quantitative Spectro	38.28%	21.38%	15.28%	14.70%	7.64%	2.72%
Geochimica et Cosmochimica	26.56%	20.21%	6.25%	16.50%	5.37%	25.10%
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Journal of Atmospheric and Sol	30.47%	27.31%	17.38%	14.67%	7.45%	2.71%
Procedia Engineering	1.42%	81.80%	16.78%	0.00%	0.00%	0.00%
Journal of Chromatography A	8.02%	9.77%	19.30%	16.04%	20.55%	26.32%
Journal of Hydrology	28.83%	28.57%	11.95%	15.32%	9.35%	5.97%

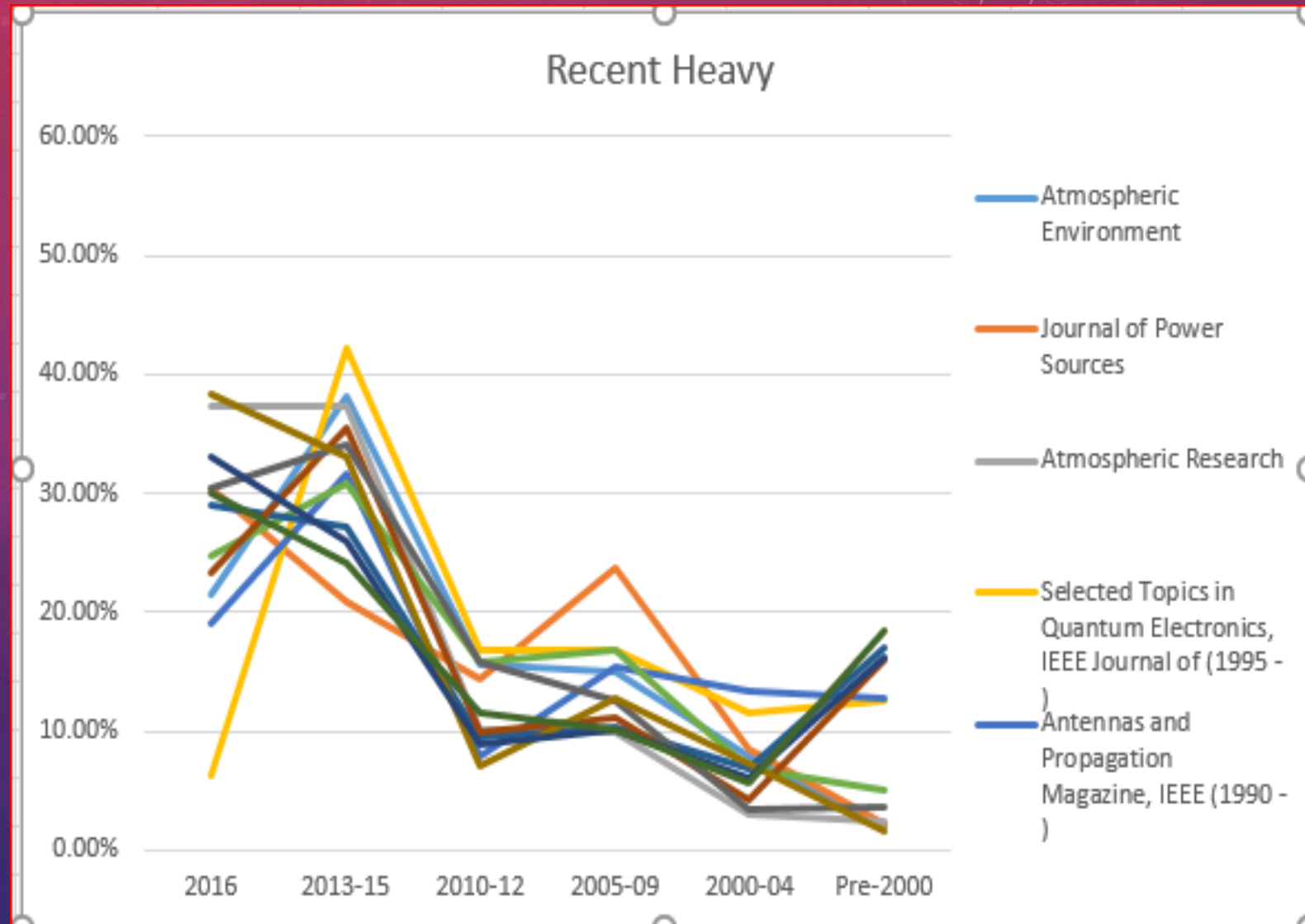
CURRENT HEAVY

- **Current year (2016) use is > 30%**
 - Nature: current year more than 50%
- Current year is >10% than previous 3 years



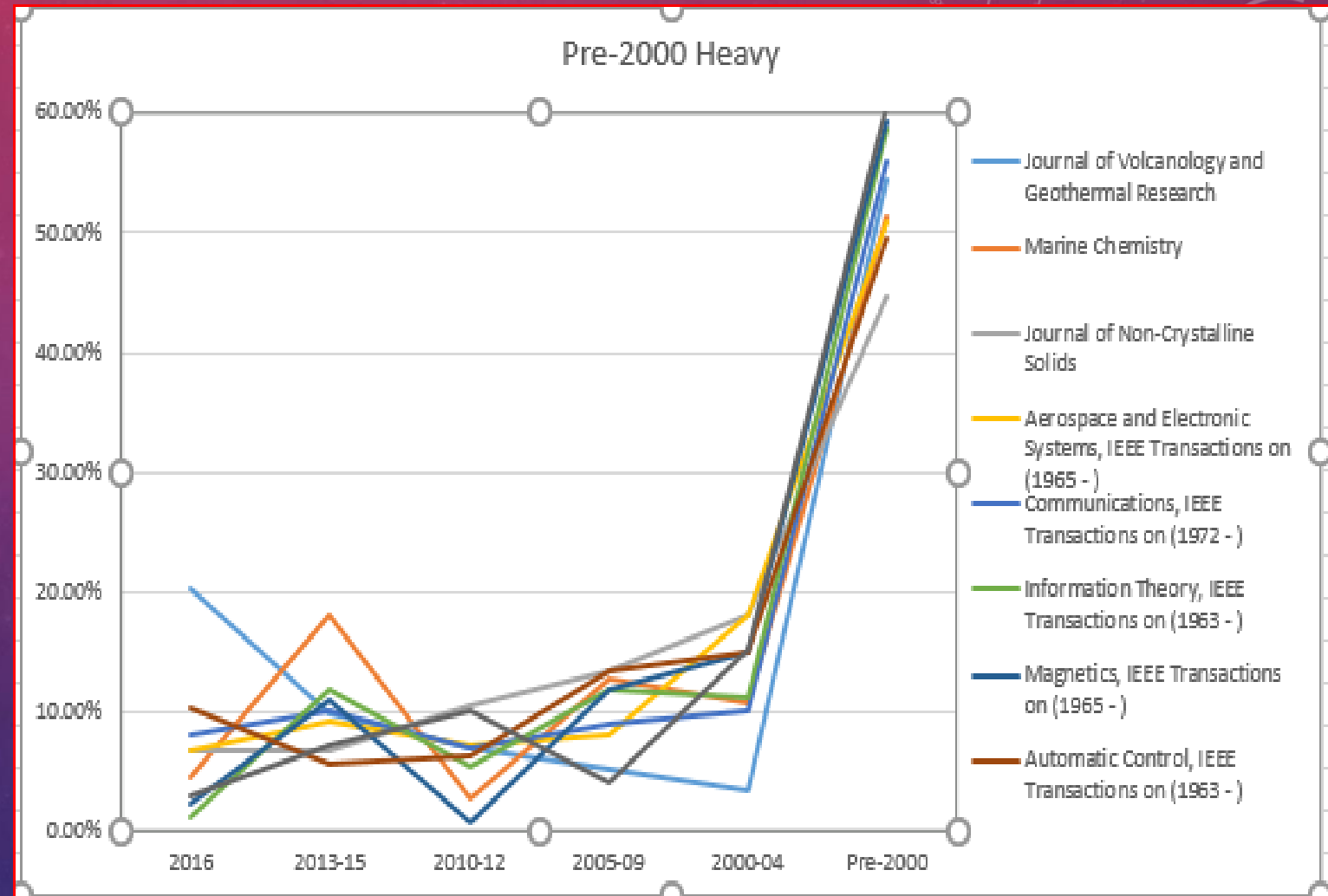
RECENT HEAVY

- Current year plus 3 (2013-2016) usage is > 50% of total
- Two subpatterns:
 - Current < past 3:
 - Current and past 3 at same level



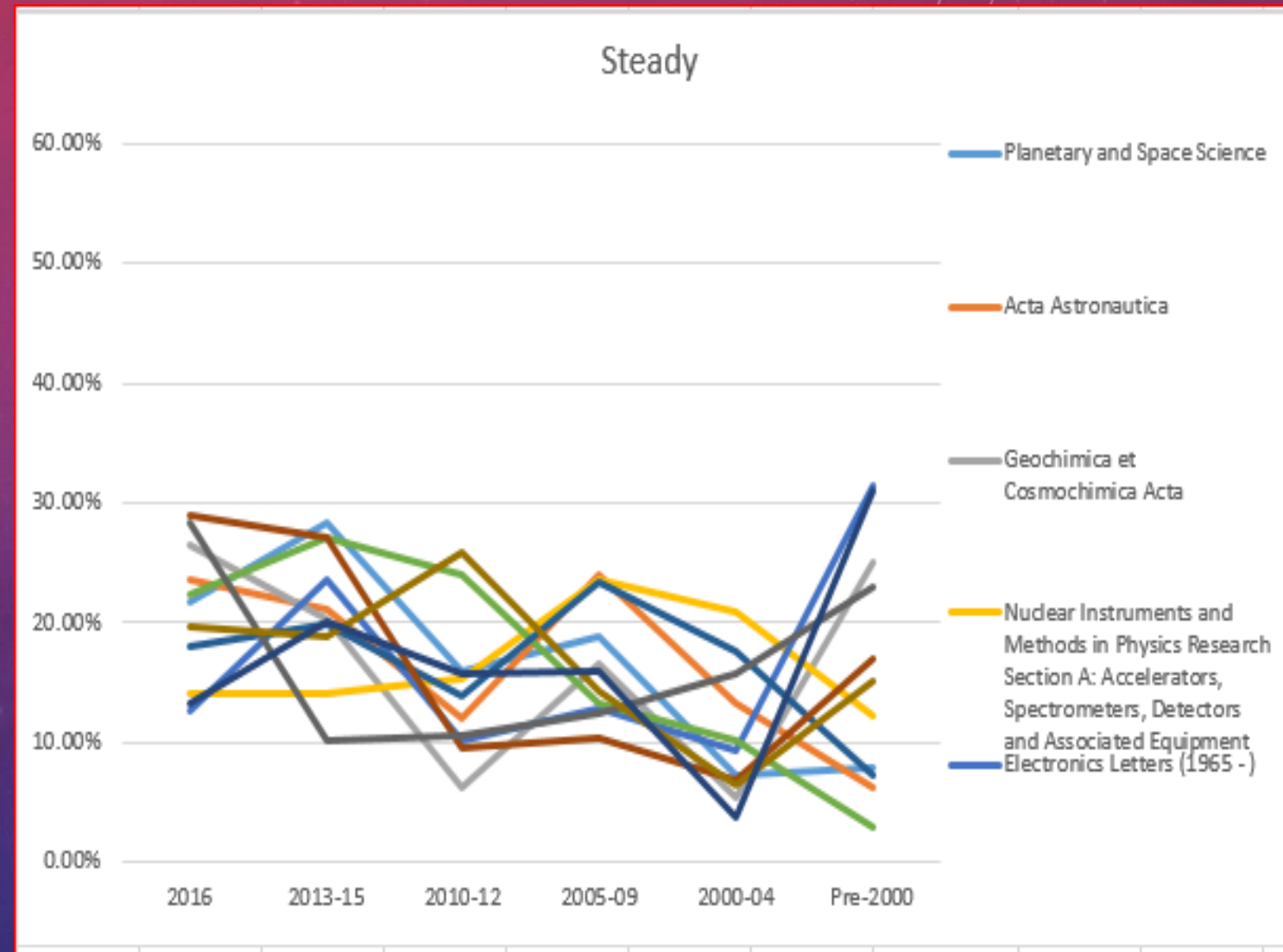
PRE-2000 HEAVY

- Pre-2000 downloads >40% of total



STEADY

- Every category is less than 30% of total

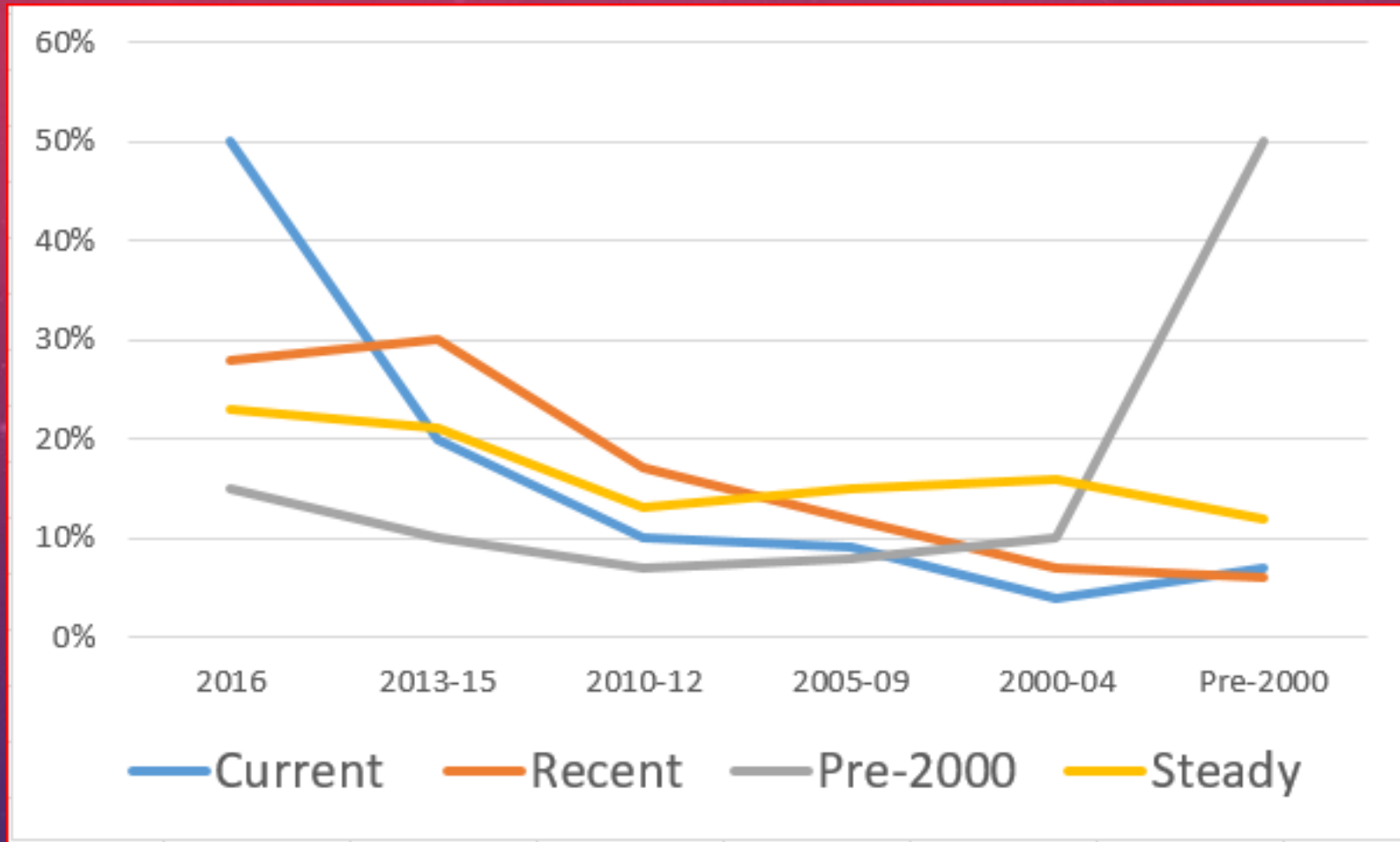


SOME DETAILS

- Titles featured all have at least 200 downloads in 2016
- Names and definitions of the patterns can be further refined
- All graphs done with Excel
- Some journals can fit into more than one category: current/recent heavy
- Most journals across years have same/similar pattern

INSIGHTS & FURTHER STUDIES

- Used for collection management, communication with management
- Embargoed titles: need direct subscription for the Current Heavy titles
- Back files: negotiate for trial period then decide
- Potential for sharing with other data scientists
- Next: Turn-away reports by publication year
- Same journal at different institutions: same pattern?
- Patterns for social sciences and humanities journals?



Comments and questions?